



Introducing Ingres

HP OpenVMS Technical Update Days

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Agenda

- Ingres Becomes Actian
- Company Summary
- Why Are We Here?
- Ingres Business Capabilities
- Products
- Migration
- Product Roadmap
- Enterprise Support
- Services
- Questions

Ingres becomes Actian



Taking Action on Big Data

- 22 September 2011
- Actian Corporation
- Existing Database Products
- New Action Apps

Taking Action on Big Data



- Continue to develop and support existing products.
- Business as usual

Company Summary

Action delivers Innovative and Enabling Technology that allows Customers and Partners to develop cost-effective solutions for business-critical applications.

- More than 10,000 commercial customers in 58 countries
- Global “24 by 7” Support Organization
- A lean, focused, and agile technology provider
- A profitable and cash generating global business



**Proven pedigree delivers:
Performance, Scalability,
Security, High Availability with
24/7 Global Support**



Over 10,000 Customers in 58 Countries



ImPressing Solutions



Why are we here?

Cash For Clunkers



Trade in that old, slow HP Superdome
for 50% off a much faster Sun server.

ORACLE

Trade in any HP Superdome for 50% off the list purchase price of a Sun M9000/M9000 server.
Offer expires 5/31/11. More details at oracle.com/goto/CashForClunkers

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Oracle Press Release – 22 March 2011



ORACLE

Oracle Stops All Software Development For Intel Itanium Microprocessor

REDWOOD SHORES, Calif., March 22, 2011

After multiple conversations with Intel senior management Oracle has decided to discontinue all software development on the Intel Itanium microprocessor. Intel management made it clear that their strategic focus is on their x86 microprocessor and that Itanium was nearing the end of its life.

Both Microsoft and RedHat have already stopped developing software for Itanium. HP CEO Leo Apotheker made no mention of Itanium in his long and detailed presentation on the future strategic direction of HP.

Oracle will continue to provide customers with support for existing versions of Oracle software products that already run on Itanium.

HP Press Release – 23 March 2011



HP Supports Customers Despite Oracle's Anti Customer Actions

Amid plummeting SPARC server market share, Oracle seeks to force customers to buy their servers

PALO ALTO, Calif., March 23, 2011

HP today reiterated that it will continue the development and innovation of Itanium®-based Integrity server platforms with its HP-UX operating system using a roadmap that extends more than 10 years.

In addition, HP will continue to support customers running existing versions of Oracle software on Itanium-based Integrity servers, both existing and future platforms, during the same timeframe. Last year, HP launched the industry's most modern mission-critical architecture in more than a decade. This constitutes the longest published roadmap of any UNIX vendor in the industry.

For more go to:

<http://www.hp.com/hpinfo/newsroom/press/2011/110323c.html?mtxs=rss-corp-news>

Ingres – Business Critical Capabilities



Business Continuity

- Cluster Support for High Availability
- Designed for “Set & Forget” operation
- Replication
- Parallel Backup & Recovery
- On-line Backup
- In Place Upgrades



Compliance & Security

- Auditing
- Role Separation
- Tracing
- Standards based



Performance & Scalability

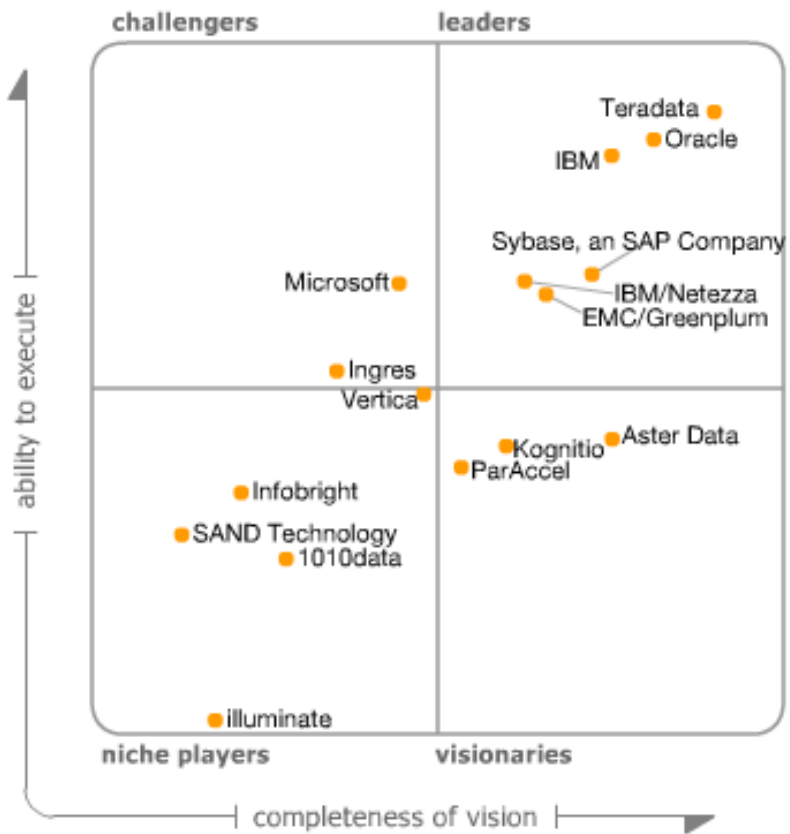
- Optimise Peak Demands
- Scale without recoding
- Rapid Innovation



Enterprise Support

- Regional Support Centres
- Single Global Support Number
- Follow-the-Sun 24 x 7 issue resolution

Gartner Magic Quadrant Positions Ingres as a “Challenger”

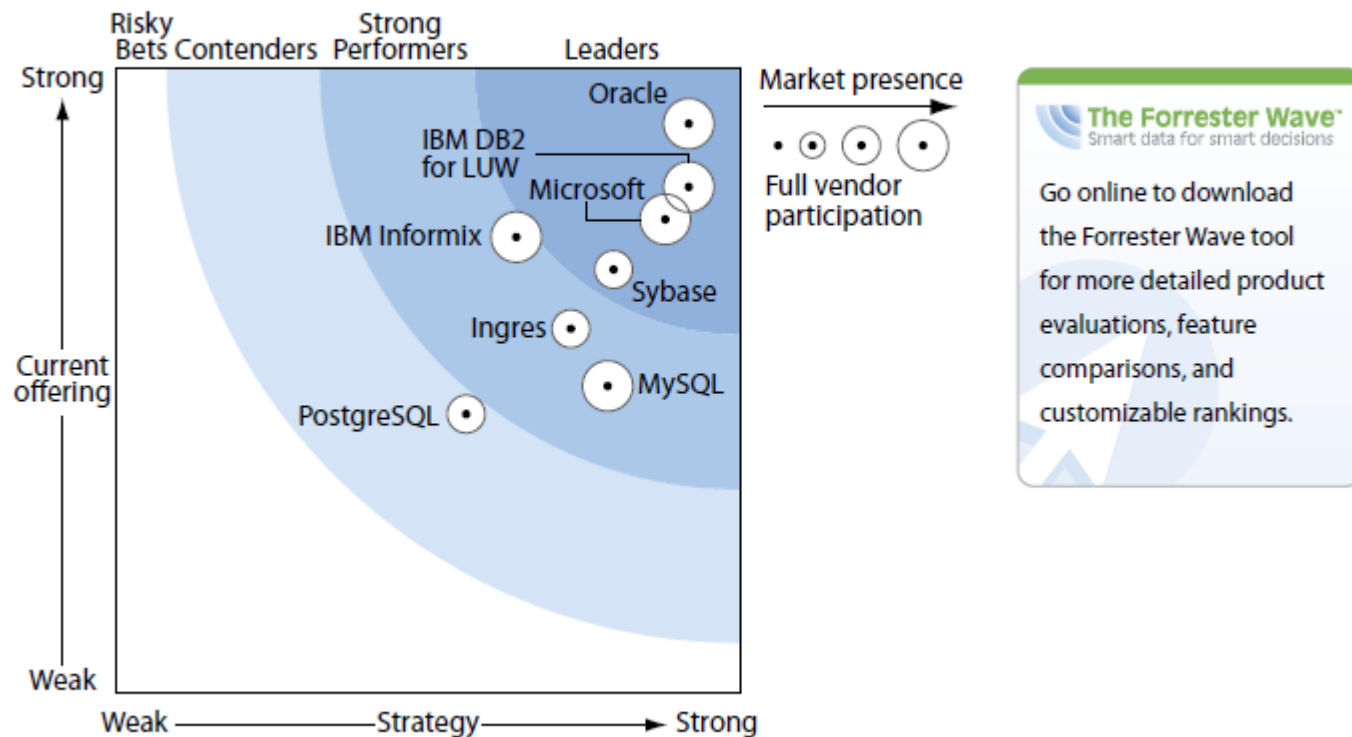


As of January 2011

“it is the only open-source DBMS with proven maturity for mission-critical applications, including data warehousing. With VectorWise technology and strong software partners, Ingres is positioned well as a Challenger.”

Latest Forrester Enterprise Database Wave

Figure 2 Forrester Wave™: Enterprise Database Management Systems, Q2 '09



Source: Forrester Research, Inc.

Products

Products



Core Products

Ingres

- Enterprise-grade
- Open Source
- Relational database

OpenROAD

- Development language tool
- Enables Rapid development
- Flexible deployment

Vectorwise

- The World's fastest analytics database

What you need to know about Ingres

What we believe matters to you

- Cost-effective solution
- Is reliable, performs well, and is scalable
- Can be implemented in a reasonable time frame
- Has a good payback / ROI
- Demonstrates characteristics that can be leveraged elsewhere
- Is viable in the long-term

Ingres Database

- First created as a research project in 1973
- Database from which Sybase, MS SQLServer, PostgreSQL and others derived.
- Fully transactional (ACID compliant)
- Open Source
- Extensive Platform support – (Unix, Linux, OpenVMS, Windows)
- Unicode (UTF-8) support
- SQL compliant
- Ingres 10 released in Q2 2011
- DB Drivers for:
 - JDBC, .Net, Python, PHP, Perl, Ruby on Rails, Hibernate
 - Plus ODBC/UnixODBC
- Ingres 9.2 for HP Integrity running OpenVMS
 - Both clustered and standalone versions
- 32-bit and 64-bit
- LOB's/BLOB's

OpenROAD

Application Development Language

Version 5.1 released Q3 2011



Object-Oriented Development Language

Graphical User Interface (GUI)

Extensive Platform Support – (Unix, Linux, Windows)

Fat Client or Multi-tiered (using OR Application Server)

Plug-ins for Web-enablement (using HTML, Java and .Net)

Graphical IDE

XML Support

Vectorwise

World's Fastest Analytics Database – TPC-H

Version 1.6 Released July 2011

64-bit Linux

64-bit Windows



Other Products

Ingres High Volume Replicator (HVR)

- Disaster Recovery / High Availability
- Data Replication
- Zero Downtime Maintenance

Enterprise Access

- Access multiple DBMS repositories as though a single repository
- Oracle
- DB2 (UDB)
- MS SQL Server

Migration

How Does Ingres Stack Up?

Enterprise OLTP Features	Ingres	Oracle 11g SE/EE	Microsoft SQL Server 2008 EE	MySQL 5.5	PostgreSQL 9.0.1
Triggers	Y	Y	Y	Y ¹	Y
Views	Y	Y	Y	Partial ¹	Partial
Stored Procedures	Y	Y	Y	Y ¹	Y
Transactional Control	Y	Y	Y	Add-on ^{1,2}	Y
Transactional Integrity	Y	Y	Y	Add-on ^{1,2}	Y
Referential Integrity	Y	Y	Y	Add-on ³	Y
Unicode Data Types	Y	Y	Y	Y ⁴	N
Program Language Pre-compilers	Y	Y	Y ⁵	Partial	Y
Drivers: JDBC, ODBC, .NET, etc.	Y	Y	Y	Partial	Y
GRID	N	Y	N	N	N
Data Type Validation	Y	Y	Y	Y ¹	Y

Notes: ¹ Feature added in 5.0 but very limited support
² Varies by partner storage engine
³ Available only on one partner storage engine

⁴ Some restrictions
⁵ Some Java limitations

Source: Ingres, Mar 2011

How Does Ingres Stack Up?

Manageability, Ease-of-Use, Security	Ingres	Oracle 11g SE/EE	Microsoft SQL Server 2008 EE	MySQL 5.5	PostgreSQL 9.0.1
Hot Backup	Y	Y	Y	Add-on	Y
Online Table & Index Reorganization	Y	Y	Y	Partial	Y
Security: Roles and Role Separation	Y	Y	Y	N	N ⁴
Online Administration	Y	Y	Y	Partial	Y
Multiple Native Storage Structures	Y	N	N	N	N
Quick Install (under 5 minutes)	Y	N	N	Y	Y
Audit	Y	Y	Y	Partial	N
Data Compression	Y	Y ¹	Y	N ²	N
Data Warehousing Features					
Peer-to-peer Replication	Y	Add-on	Add-on	Y	Y
Parallel Query Execution	Y	Y ¹	Y	N	N
Data Partitioning	Y	Y	Y	Y	N ³

Notes:

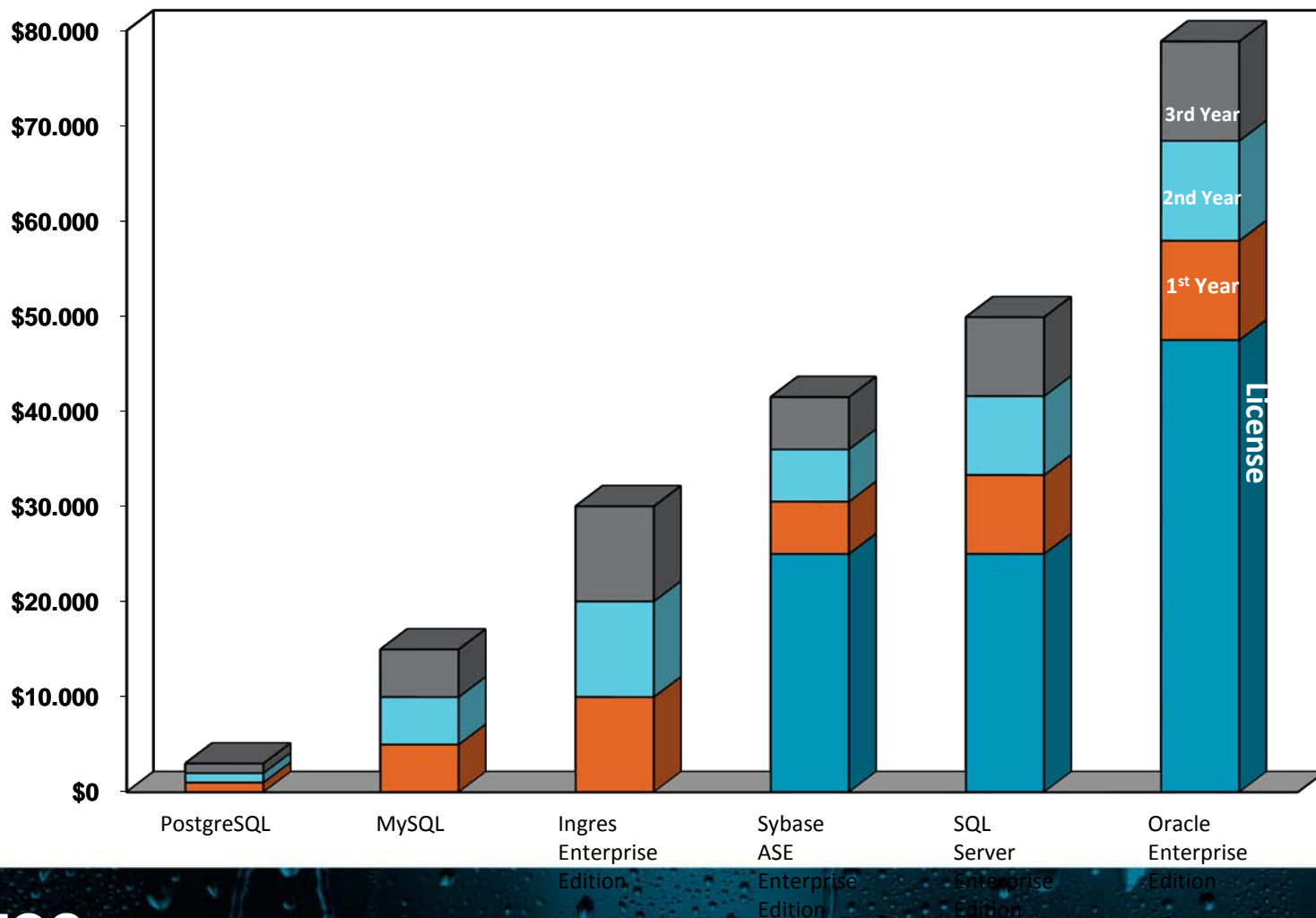
¹ Only available in enterprise edition

² Can causes data corruption

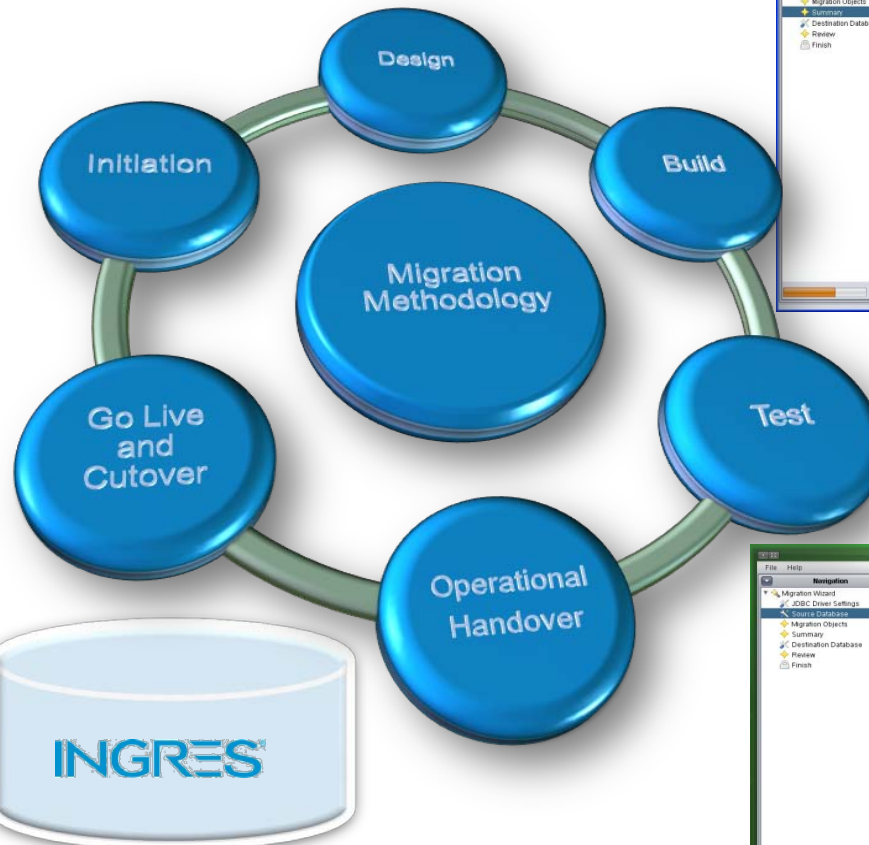
³ Limited

⁴ No Role Separation

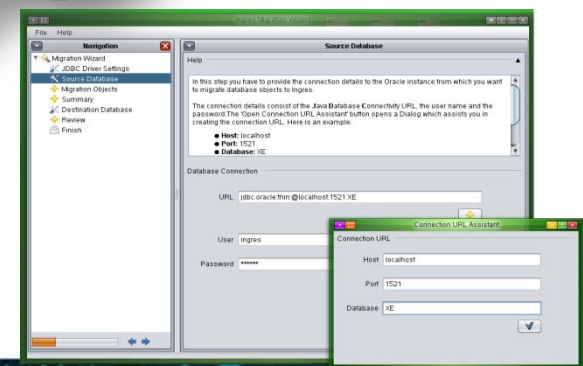
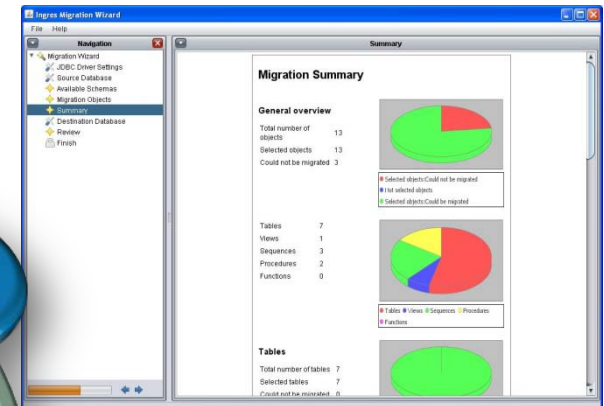
Pricing Comparison – 3 year TCO (license + support)



Migration Services



Tables
Views
Procedures
Indexes
Functions
Sequences
Triggers



Migration Methodology

Design Stage

- Specifies migration in more detail
- Defines how each part of system will work in new environment
- Elements will either be unchanged, amended or replaced

Build Stage

- Migrate database schema and application code
- Implement changes to other elements

Testing Stage

- Test that all of elements have been moved over properly and that the application works as expected
- Validate that the data can be moved over successfully
- Test the live cutover process

Operational Handover

- Ensure that operational support is in place
- Backup, recovery, housekeeping, monitoring, training

Go Live & Cutover

- Execute the cutover plan

Target Audience for the Migration Toolkit

**Independent Software
Vendors**

**System
Integrators**



End Users

Ingres Migration Toolkit Capabilities

Object	Oracle	MySQL	SQL Server	Sybase
Schemas	X	X	X	Coming soon
Tables	X	X	X	Coming soon
Constraints	X	X	X	Coming soon
Indexes	X	X	X	Coming soon
Triggers	X	X	X	Coming soon
Views	X	X	X	Coming soon
Packages	*			
Procedures	X	X	X	Coming soon
Functions	X			
Sequences	X		X	Coming soon
Users/Roles	X	X	X	Coming soon
Object Types	*			
Database Links	*			

* - Equivalent functionality not available in Ingres

Product Roadmap

Product Roadmap

- **3-year focus for activities currently planned**

- Tied to identified business needs, competitive needs, and customer needs

- **5-year vision of where we are going**

- Influenced by market analysis and defined customer need

- Customer partnership opportunities to deliver specific functional requirements (e.g. Spatial)

- Inclusion of community contributions


Ingres Database Roadmap

Pre-Ingres Release 10

- About 70% customers on version 9.x or intending to move
- Early adopters of version 10
 - Long-standing feature/enhancement requests delivered
- More requests for features/enhancements welcome
- Our Goal for Ingres
 - Most cost-effective, functionally-capable, business-critical OLTP DBMS
- Choice of independence when plan IT investment strategies

Ingres Database Roadmap

Release 10.0.1 Q1 2012

- **Common Table Expressions (inline views)**
-  **Unicode collation improvements**
 - to boost general performance of Unicode databases
- **DROP IF EXISTS Syntax**
- **Copydb/unloaddb enhancements**
 - Allows copy of non-UTF-8 data out into UTF-8 data files
- **Multirow Inserts**
 - `INSERT INTO tbl (col1,col2) VALUES (1,'a'), (2,'b'), (3,'c');`
- **Various new date scalar functions**

Ingres Database Roadmap

Release 10.x

- **UTF-8 Transliteration**
 - UTF-8 conversions in Ingres Net (GCC)
- **Ingres Remote GCA Access**
 - Remote access with no need for an Ingres Client installation
 - OpenROAD, ODBC, ESQL, etc.
- **ODBC Batch Execution**
- **Geospatial Support**
 - Community project
 - Open Geospatial Consortium (OGC) support
 - Geospatial types available through OpenAPI (C), ODBC, JDBC, Perl, Ruby, Python
- **Ingres Management Tool**
 - New GUI tool currently being developed with the aim of providing comprehensive DBA functionality



Enterprise Support

Enterprise Support

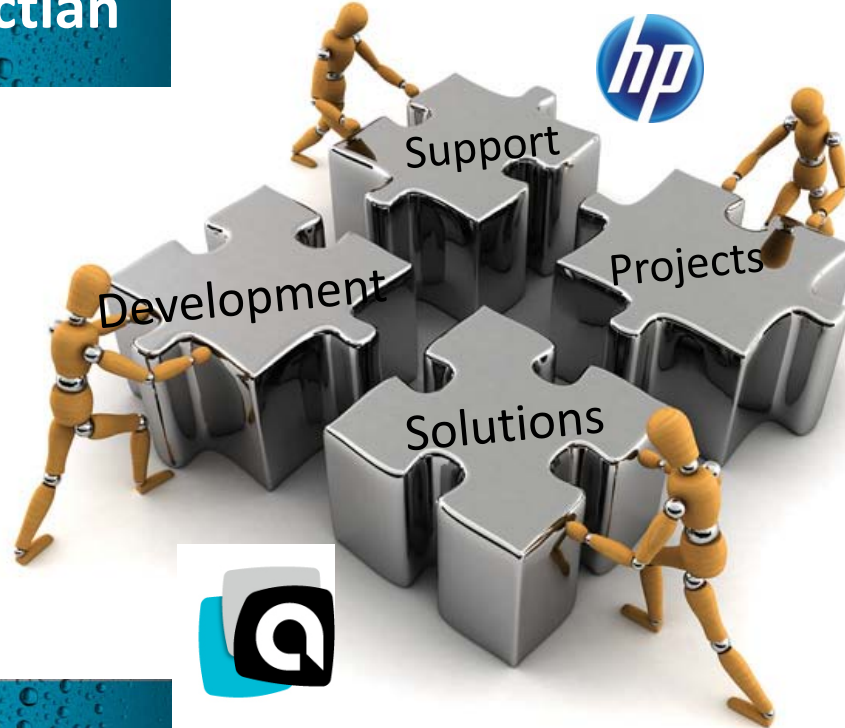
- 24x7x365 technical assistance (based on severity)
- Direct access to Ingres Product Service Engineers
- Global support from our offices in the United States, United Kingdom, France, Germany, and Australia
- Enterprise-class online support interface (Actian Service Desk)
- Multi-channel support (phone, web, collaboration) designed to give you the power to choose the right service channel to meet your needs
- Collaborative Support (featuring WebEx Support Center)
- Ingres Diagnostics - suite of tools used to collect important system, product, and problem information to facilitate rapid problem diagnosis and resolution
- Access to Ingres patches, service packs, product updates and major upgrades through Electronic Software Delivery (esd.actian.com)

Services

Action Services

Everything Action

Development



Projects

Solutions

Action Services

Services around the database

- Remote Database Administration (rDBA)
- Database Health Checks

Application Development and Support

-OpenROAD, Java, .Net, ABF, C

Projects

- Database Upgrades / Migrations
- Application Modernisation – Transforge and Alchemy

Solutions

- BI, ECM, ETL, Action Apps

Summary

We are a strong, stable and growing company with a proven track record on HP-UX and OpenVMS

Our products are competitive

We have plans to continue to improve and enhance our product line on HP Integrity Servers

We have a very customer-centric approach as part of our plan for success

We are focused on growth and joint success!

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QUESTIONS